

SUPCON DCS Training

COURSE CONTENT

GET IN TOUCH



Multisoft Systems
B - 125, Sector - 2, Noida



(+91) 9810-306-956



info@multosoftsystems.com



www.multosoftsystems.com

About Multisoft

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About Course

SUPCON DCS Training equips professionals with the practical expertise required to configure, operate, and maintain SUPCON Distributed Control Systems used in industrial automation. The course covers system architecture, engineering configuration, control logic development, HMI design, alarm management, industrial communication, commissioning, diagnostics, and maintenance. Through practical implementation and industry-focused scenarios, participants develop the skills needed to support reliable, safe, and efficient process control operations.

Module 1: Introduction to SUPCON DCS

- ✓ Fundamentals of Distributed Control Systems (DCS)
- ✓ Supcon DCS Overview
- ✓ DCS Architecture and Components
- ✓ Process Automation Concepts
- ✓ Industrial Applications
- ✓ System Benefits

Module 2: System Architecture and Hardware

- ✓ Engineering Station
- ✓ Operator Station
- ✓ Controller Hardware
- ✓ I/O Modules
- ✓ Redundant System Architecture
- ✓ Hardware Configuration
- ✓ System Topology

Module 3: Engineering Configuration

- ✓ Engineering Software Overview
- ✓ Project Creation
- ✓ System Database Configuration
- ✓ Controller Assignment
- ✓ Tag Management
- ✓ Parameter Configuration

- ✓ Project Validation

Module 4: Controller Engineering

- ✓ Control Strategies
- ✓ Function Block Configuration
- ✓ Sequential Control
- ✓ Analog and Digital Signal Processing
- ✓ PID Controller Configuration
- ✓ Control Loop Tuning
- ✓ Logic Testing

Module 5: HMI Development and Process Graphics

- ✓ HMI Fundamentals
- ✓ Graphic Display Design
- ✓ Mimic Diagram Development
- ✓ Process Visualization
- ✓ Faceplates
- ✓ Navigation Screens
- ✓ Operator Interface Best Practices

Module 6: Alarm, Events and Historian

- ✓ Alarm Configuration
- ✓ Alarm Prioritization
- ✓ Event Management

- ✓ Alarm Acknowledgement
- ✓ Historical Data Collection
- ✓ Trend Configuration
- ✓ Process Reporting

Module 7: Field Instrumentation and Industrial Communication

- ✓ Process Instrumentation Integration
- ✓ Analog and Digital Signals
- ✓ Modbus Communication
- ✓ OPC Connectivity
- ✓ Device Integration
- ✓ Communication Diagnostics
- ✓ Signal Validation

Module 8: Process Monitoring and Plant Operations

- ✓ Process Monitoring Techniques
- ✓ Operator Functions
- ✓ Process Optimization
- ✓ Batch Monitoring
- ✓ Plant Performance Monitoring
- ✓ Operational Best Practices
- ✓ System Health Monitoring

Module 9: System Diagnostics and Maintenance

- ✓ Diagnostic Tools
- ✓ Fault Identification
- ✓ Preventive Maintenance
- ✓ Controller Diagnostics
- ✓ Communication Troubleshooting
- ✓ System Backup and Recovery
- ✓ Maintenance Best Practices

Module 10: Commissioning and Testing

- ✓ Pre-Commissioning Activities
- ✓ Loop Checking
- ✓ Functional Testing
- ✓ Factory Acceptance Test (FAT)
- ✓ Site Acceptance Test (SAT)
- ✓ Startup Procedures
- ✓ Performance Validation

Module 11: System Security and Optimization

- ✓ User Management
- ✓ Access Control
- ✓ System Security
- ✓ Backup Strategies
- ✓ Performance Optimization

- ✓ Redundancy Management
- ✓ Reliability Enhancement

Module 12: Industrial Automation Project

- ✓ End-to-End DCS Configuration
- ✓ Controller Engineering
- ✓ HMI Development
- ✓ Alarm Configuration
- ✓ Communication Integration
- ✓ System Testing
- ✓ Commissioning Exercise
- ✓ Final Industrial Project